

RB-DV - TRB-DV

The Vacuum Blowers



ROBUSCHI®

PUMPS • BLOWERS & COMPRESSORS

RB-DV series of rotary three lobe PD blowers can operate at high vacuum levels thanks to a **ROBUSCHI patented device that injects atmospheric air**.

The new patented device allows the blower to operate at maximum vacuum without overheating.

RB-DV series blowers can reach vacuum levels of up to **93% on a dead head - 28" Hg** without the need to water inject or uses an upstream heat exchanger. Consequently lowering installation and operating costs.

Main blowers features are:

- **Vacuum rate up to 93% (blank off) - 28" Hg and 90% -27" Hg continuous;**
- **Nominal capacity from 840 to 10.500 m3/h - from 494 CFM to 6200 CFM;**
- Gases and vapours can be handled;
- Lack of sliding parts, reduces wear;
- Safe operation environmentally friendly;
- No oil mist;
- **Available RB-DV in ATEX version on request.**



APPLICATIONS

RB-DV series blowers are selected by applications requiring vacuum levels greater than 50% or 15" Hg (for applications requiring vacuum 0-50% / 0-15" Hg see ROBUSCHI RBS P.D. Blowers).

RB-DV series blowers are used in the following applications:

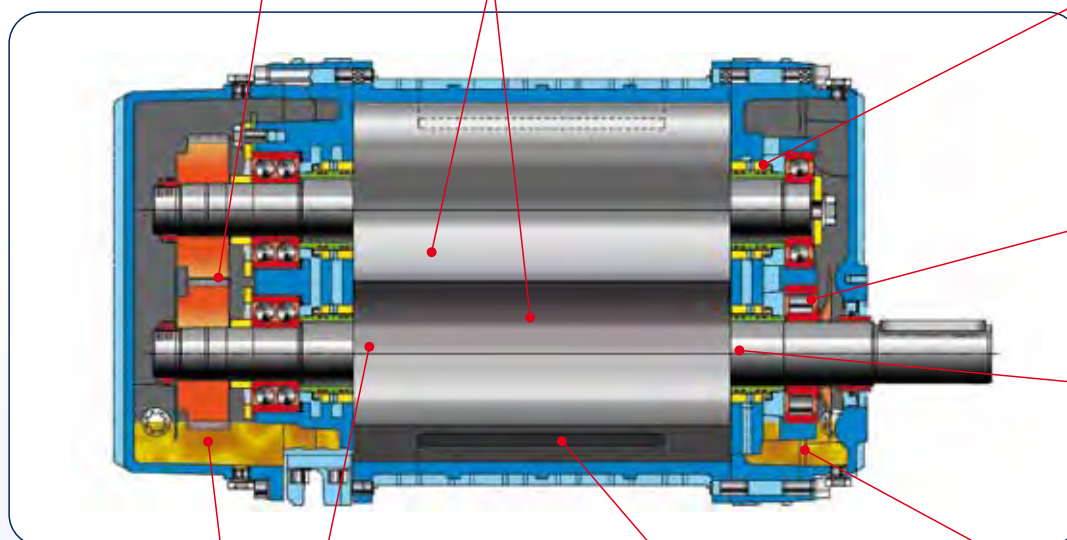
- Vacuum trucks handling wet and/or dry waste (Industry, Municipalities etc...);
- Pneumatic conveying (Ash transport, Chemicals, Pharmaceuticals industry etc...);
- Central vacuum systems (Packaging, Vacuum cleaning etc...);
- Deaeration plants (Plastic extrusion, Brick production, etc...).

Available complete and compact groups for truck applications (TRB-DV).

Helical gears provide near noiseless smooth and synchronized operation.

Heavy duty rotor and shaft assemblies safely allows operation at higher rpms providing outstanding performance.

Labyrinth piston ring provides low wear.



Heavy duty bearing for belt or gear transmission.

Heavy duty bearings allow greater flexibility setting up belt or close coupled transmission.

Double ended oil bath lubrication ensures long bearing life.

Patent tri (3) lobe rotors with ROBUSCHI high performance profile (**Low Pulse**).

Patent air injection nozzle ensures cool operation under all vacuum conditions.

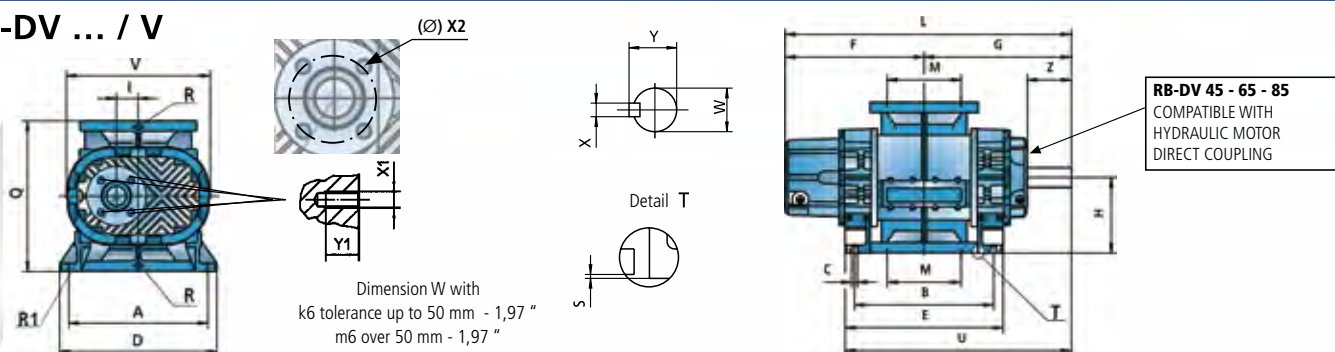
Double ended oil bath lubrication ensures long bearing life.

PERFORMANCE

BLOWER		RPM	VACUUM																																
			30% 9"HG				50% 15"HG				60% 18"HG				70% 21"HG				80% 24"HG				85% 25,5"HG				90% 27"HG				93% 28"HG				
SIZE	Q		m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	m³/h	CFM	kW	BHP	
45	m³/h 840 494 CFM	2000	236	139	3,5	4,7	182	107	5,4	7,2	144	85	6,3	8,4	83	49	7,2	9,6																	
		2500	320	188	4,4	5,9	266	156	6,7	9,0	228	134	7,9	10,6	167	98	9,0	12,1	44	26	10,2	13,7													
		3000	404	238	5,3	7,1	350	206	8,1	10,9	312	184	9,5	12,7	251	148	10,9	14,6	128	75	12,3	16,5													
		3500	488	287	6,1	8,2	434	255	9,4	12,6	396	233	11,0	14,7	335	197	12,7	17,0	212	125	14,3	19,2	77	45	15,1	20,2									
		4000	572	336	7,0	9,4	518	305	10,7	14,3	480	282	12,6	16,9	419	246	14,5	19,4	296	174	16,3	21,8	161	95	17,3	23,2									
		4500	656	386	7,9	10,6	602	354	12,1	16,2	564	332	14,2	19,0	503	296	16,3	21,8	380	224	18,4	24,7	245	144	19,4	26,0									
65	m³/h 1550 912 CFM	5000	740	435	8,8	11,8	680	400	13,4	18,0	648	381	15,8	21,2	587	345	18,1	24,3	464	273	20,4	27,3	330	194	21,6	28,9									
		2000	530	312	5,8	7,8	462	272	9,4	12,6	380	224	11,0	14,7	300	176	13,0	17,4																	
		2500	688	405	7,5	10,1	630	371	12,0	16,1	540	318	14,0	18,8	450	265	16,5	22,1	340	200	18,8	25,2													
		3000	850	500	9,5	12,7	790	465	14,9	20,0	700	412	17,5	23,5	610	359	20,0	26,8	510	300	23,0	30,8	300	176	24,3	32,6									
		3500	1012	595	11,6	15,5	950	559	17,9	24,0	860	506	21,0	28,1	770	453	24,5	32,8	670	394	27,0	36,2	480	282	29,0	38,9									
		4000	1175	691	14,0	18,8	1100	647	21,2	28,4	1050	618	25,0	33,5	930	547	28,0	37,5	840	494	32,0	42,9	630	371	34,0	45,6	290	171	36,5	48,9					
85	m³/h 2724 1602 CFM	4500	1336	786	16,7	22,4	1250	735	24,5	32,8	1180	694	28,9	38,7	1100	647	32,9	44,1	990	582	37,0	49,6	780	459	39,0	52,3	400	235	41,0	54,9					
		4800	1433	843	18,5	24,8	1350	794	27,1	36,3	1250	735	31,4	42,1	1200	706	35,5	47,6	1100	647	40,0	53,6	900	529	42,2	56,5	450	265	44,5	59,6	BO	BO	46,0	61,6	
		1500	823	484	9,5	12,7	720	424	15,5	20,8	600	353	18,5	24,8	480	282	21,5	28,8																	
		2000	1183	696	13,2	17,7	1090	641	21,5	28,8	900	529	25,0	33,5	720	424	29,2	39,1	570	335	33,2	44,5													
		2500	1543	908	17,3	23,2	1450	853	27,3	36,6	1320	776	32,3	43,3	1100	647	37,3	50,0	850	500	42,3	56,7	600	353	44,8	60,0									
		3000	1903	1119	22,1	29,6	1800	1059	34,1	45,7	1620	953	40,0	53,6	1390	818	46,1	61,8	1150	676	52,1	69,8	900	529	55,1	73,8	415	244	60,0	80,4					
105	m³/h 3900 2294 CFM	3500	2263	1331	27,4	36,7	2100	1235	41,4	55,5	2040	1200	48,0	64,3	1860	1094	55,4	74,2	1590	935	62,4	83,6	1350	794	65,9	88,3	690	406	69,4	93,0					
		3800	2479	1458	31,0	41,5	2400	1412	46,0	61,6	2270	1335	53,5	71,7	2040	1200	61,4	82,3	1800	1059	69,0	92,5	1560	918	72,8	97,6	750	441	76,6	102,6	BO	BO	79,0	105,9	
		1500	1608	946	17,5	23,5	1400	824	28,3	37,9	1300	765	33,3	44,6	1000	588	39,2	52,5	600	353	44,6	59,8													
		1750	1934	1138	20,9	28,0	1720	1012	33,6	45,0	1600	941	39,3	52,7	1300	765	46,2	61,9	900	529	52,6	70,5	350	206	55,7	74,6									
		2000	2260	1329	24,5	32,8	2040	1200	39,0	52,3	1900	1118	46,3	62,0	1600	941	53,5	71,7	1200	706	60,7	81,3	650	382	64,4	86,3									
		2250	2586	1521	28,4	38,1	2360	1388	44,7	59,9	2200	1294	52,9	70,9	1900	1118	61,0	81,7	1500	882	69,2	92,7	950	559	73,3	98,2	300	176	77,6	104,0					
125	m³/h 5950 3500 CFM	2500	2912	1713	32,6	43,7	2680	1576	50,7	67,9	2500	1471	59,8	80,1	2200	1294	68,8	92,2	1800	1059	77,9	104,4	1250	735	82,4	110,4	600	353	87,2	116,8					
		2750	3238	1905	37,2	49,8	3000	1765	57,1	76,5	2800	1647	67,0	89,8	2500	1471	77,0	103,2	2100	1235	87,0	116,6	1550	912	91,9	123,1	900	529	97,3	130,4					
		3000	3564	2096	42,0	56,3	3320	1953	63,8	85,5	3100	1824	74,6	100,0	2800	1647	85,5	114,6	2400	1412	96,4	129,2	1850	1088	101,8	136,4	1200	706	107,8	144,5	BO	BO	111,4	149,3	
		1070	2169	1276	23,4	31,4	1900	1118	38,2	51,2	1700	1000	45,6	61,1	1500	882	52,9	70,9	1000	588	60,3	80,8													
		1200	2492	1466	26,6	35,6	2200	1294	48,7	65,3	2050	1206	51,5	69,0	1830	1076	59,7	80,0	1330	782	68,0	91,1													
		1340	2840	1671	30,2	40,5	2570	1512	45,0	60,3	2400	1412	58,0	77,7	2150	1265	67,2	90,0	1680	988	76,4	102,4	830	488	81,1	108,7									
145	m³/h 10500 6676 CFM	1500	3237	1904	34,5	46,2	2970	1747	55,2	74,0	2800	1647	65,6	87,9	2500	1471	75,9	101,7	2080	1224	86,3	115,6	1200	706	91,5	122,6									
		1680	3684	2167	39,7	53,2	3420	2012	62,8	84,2	3250	1912	74,4	99,7	3000	1765	86,0	115,2	2520	1482	97,6	130,8	1680	988	103,4	138,6	1030	606	109,5	146,7					
		1875	4169	2452	45,6	61,1	3900	2294	71,5	95,8	3700	2176	84,4	113,1	3500	2059	97,4	130,5	3000	1765	110,3	147,8	2160	1271	116,8	156,5	1500	882	123,6	165,6					
		2100	4728	2781	53,0	71,0	4460	2624	82,0	109,9	4300	2529	96,5	129,3	4050	2382	111,0	148,7	3570	2100	125,5	168,2	2720	1600	132,7	177,8	2070	1218	140,5	188,3					
		2200	4976	2927	56,5	75,7	4700	2765	86,9	116,4	4600	2706	102,0	136,7	4300	2529	117,2	157,0	3800	2235	132,4	177,4	3000	1765	140,0	187,6	2320	1365	148,2	198,6					
		2400	5473	3219	63,9	85,6	5100	3000	97,0	130,0	5000	2941	113,6	152,2	4700	2765	130,2	174,5	4150	2441	146,7	196,6	3270	1924	155,0	207,7	2500	1471	164,0	219,8	BO	BO	169,0	226,5	

OVERALL DIMENSIONS

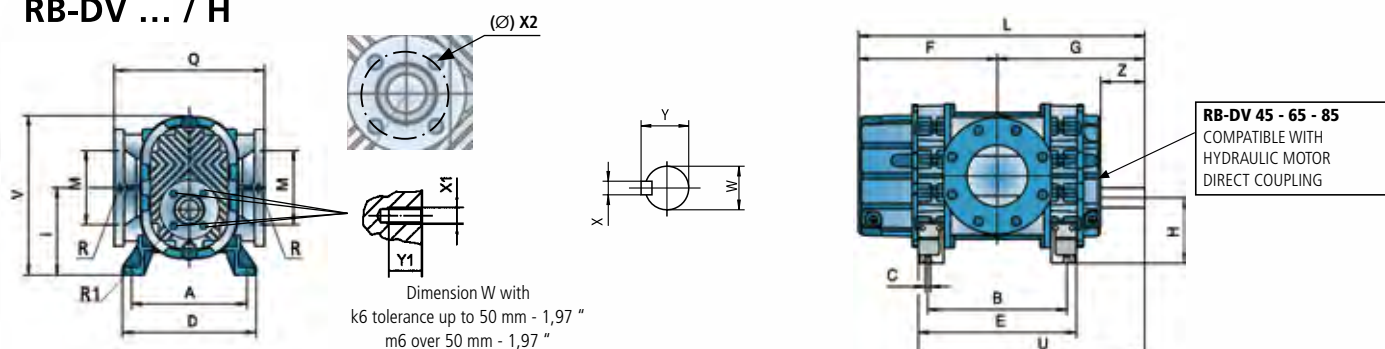
RB-DV ... / V



Blower		Ø*	A	B	C	D	E	F	G	H mm-0,5 inch-0,02	I	L	M	Q	S	U	V	W	Z	X	Y	R1	X1	X2	Y1	Weight kg lbs	
45	mm	85	295	275	12	331	311	273	295	160	42,5	568	80	319	1	452	295	38	80	10	41	50	4 x M8	100	15	97	213,8
	inches	3,34	11,61	10,83	0,47	13,03	12,24	10,75	11,61	6,30	1,67	22,36	3	12,56	0,04	17,80	11,61	1,496	3,15	0,394	1,614	1,969	4 x M8	3,937	0,591		
65	mm	107	340	341	14	385	387	340	361	185	53,5	701	150	369	1	555	345	48	110	14	52	62,5	4 x M10	125	15	160	352,7
	inches	4,22	13,39	13,43	0,55	15,16	15,24	13,39	14,21	7,28	2,11	27,60	6	14,53	0,04	21,85	13,68	1,89	4,331	0,551	2,028	2,461	4 x M10	4,921	0,591		
85	mm	135	370	431	18	420	482	405	423	225	67,5	828	150	449	1	665	415	55	110	16	59	70	4 x M10	140	15	250	551,2
	inches	5,32	14,57	16,97	0,71	16,54	18,98	15,94	16,655	8,86	2,66	32,60	6	17,68	0,04	26,18	16,34	2,165	4,331	0,63	2,323	2,756	4 x M10	5,512	0,591		
105	mm	168	430	501	18	486	557	463	497	265	84	960	200	529	1	741	522	60	140	18	64					400	881,8
	inches	6,62	16,93	19,72	0,71	19,13	21,93	18,23	19,57	10,43	3,31	37,80	8	20,83	0,04	29,17	20,55	2,362	5,512	0,709	2,52						
125	mm	212	550	590	22	640	646	528	568	300	106	1096	250	599	1	891	618	70	140	20	75					605	1334
	inches	8,352	21,65	23,23	0,87	25,20	25,43	20,79	22,36	11,81	4,176	43,15	10	23,58	0,04	35,08	24,33	2,756	5,512	0,787	2,933						
145	mm	270	680	747	26	770	805	641	695	360	135	1336	300	719	1	1098	790	85	170	22	90					1040	2293
	inches	10,62	26,77	29,41	1,02	30,31	31,69	25,24	27,36	14,17	5,31	52,60	12	28,31	0,04	43,23	31,10	3,346	6,693	0,866	3,543						

*= Gear diameter

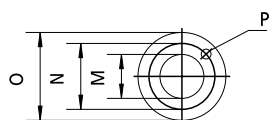
RB-DV ... / H



Blower	Ø*	A	B	C	D	E	F	G	H mm-0,5 inch-0,02	I	L	M	Q	U	V	W	Z	X	Y	R1	X1	X2	Y1	Weight kg lbs		
45	mm	350	266	275	12	302	311	273	295	132	175	568	80	318	452	320	38	80	10	41	50	4 x M8	100	15	97	213,8
	inches	13,78	10,47	10,83	0,47	11,89	12,24	10,75	11,61	5,20	6,89	22,36	6	12,52	17,80	12,60	1,496	3,15	0,394	1,614	1,969	4 x M8	3,937	0,591		
65	mm	426	283	341	14	328	387	340	361	160	213	701	150	368	555	385	48	110	14	52	62,5	4 x M10	125	15	160	352,7
	inches	4,22	11,14	13,43	0,55	12,91	15,24	13,39	14,21	6,30	8,39	27,60	6	14,49	21,85	15,16	1,89	4,331	0,551	2,028	2,461	4 x M10	4,921	0,591		
85	mm	494	325	431	18	375	482	405	423	180	247	828	150	448	665	455	55	110	16	59	70	4 x M10	140	15	250	551,2
	inches	19,44	12,80	16,97	0,71	14,76	18,98	15,94	16,65	7,09	9,72	32,60	6	17,64	26,18	17,91	2,165	4,331	0,63	2,323	2,756	4 x M10	5,512	0,591		
105	mm	568	392	501	18	448	557	463	462	200	284	925	200	528	741	545	60	140	18	64					400	881,8
	inches	22,36	15,43	19,72	0,71	17,64	21,93	18,23	18,19	7,87	11,18	36,42	8	20,79	29,17	21,46	2,362	5,512	0,709	2,52						
125	mm	712	435	590	22	526	646	528	568	250	356	1096	250	598	891	670	70	140	20	75					605	1334
	inches	28,04	17,13	23,23	0,87	20,71	25,43	20,79	22,36	9,84	14,02	43,15	10	23,54	35,08	26,38	2,756	5,512	0,787	2,933						
145	mm	830	570	747	26	640	805	641	695	280	415	1336	300	718	1098	815	85	170	22	90					1040	2293
	inches	32,68	22,44	29,41	1,02	25,20	31,69	25,24	27,36	11,02	16,34	52,60	12	28,27	43,23	32,09	3,346	6,693	0,866	3,543						

*= Gear diameter

Drilling for flat flanges UNI 2236 NP10 or ANSI 125 FF



R Manometer connection G 3/8"
Dimension W with tolerance m6

NP10 UNI 2236

M DN		N	O	P	HOLES
80	mm	160	200	18	4
	inches	6,30	7,87	0,71	
150	mm	240,2	285	23	8
	inches	9,46	11,22	0,91	
200	mm	296	340	23	8
	inches	11,65	13,39	0,91	
250	mm	350	405	24	12
	inches	13,78	15,94	0,94	
300	mm	400	475	24	12
	inches	15,75	18,70	0,94	

ANSI 125 FF

M DN		N	O	P	HOLES
3	mm	152,4	200	18	4
	inches	6,00	7,87	0,71	
6	mm	240,2	285	23	8
	inches	9,46	11,22	0,91	
8	mm	296	340	23	8
	inches	11,65	13,39	0,91	
10	mm	362	405	24	12
	inches	14,25	15,94	0,94	
12	mm	431,8	475	24	12
	inches	17,00	18,70	0,94	

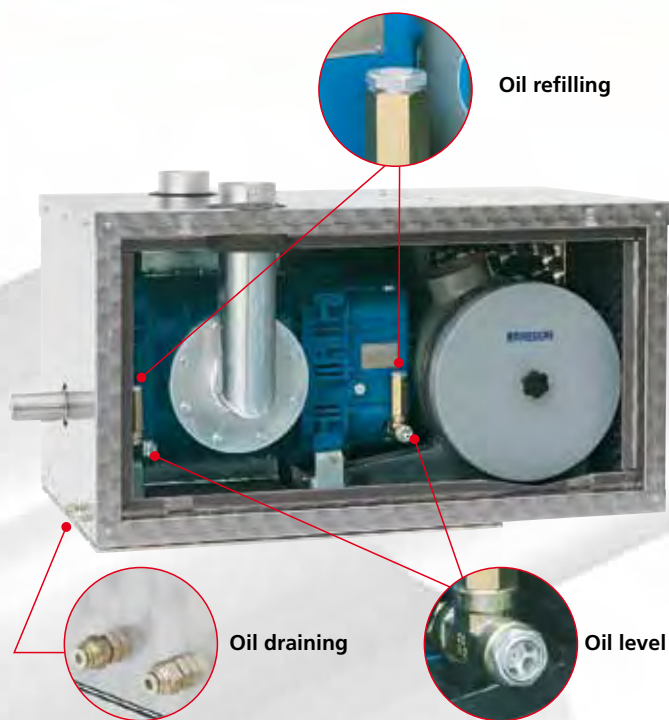
TRB-DV are **completely assembled compact group** sets with **noise enclosure developed for vacuum truck handling wet and /or dry waste**.

It is possible to install this group with up to 5° degree tilt. Power take off connection can be made by either hydraulic motor and or V- belt transmission.

TRB-DV group main features are:

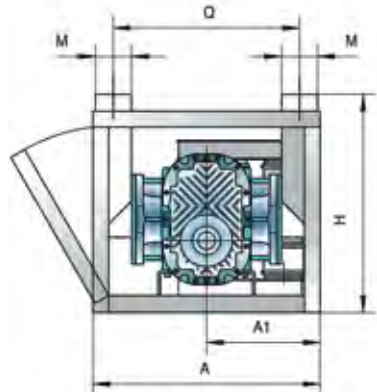
- **No oil mist** from the blower discharged into the environment;
- **No water cooling required;**
- Compact design allows flexibility positioning on truck and takes up less space;
- Easy installation;
- Simple maintenance thanks to front mounted site glasses giving clear view of oil level and easy access to draining and refilling lubricant;
- Options available: left side opening door and clock wise; left side opening door and counter clock wise; right side opening door and clock wise; right side opening door and counter clock wise;
- Stainless steel noise enclosure available on request.

TRB-DV can replace liquid ring vacuum pumps and vane vacuum pumps.

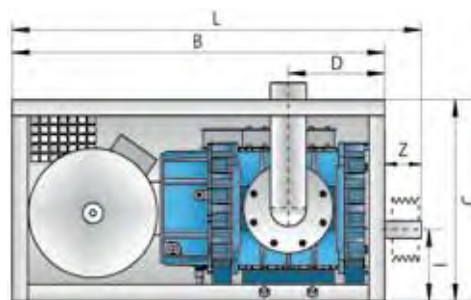
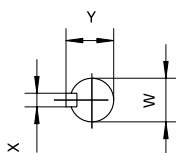


TRB-DV - OVERALL DIMENSIONS

Left side opening door enclosure.



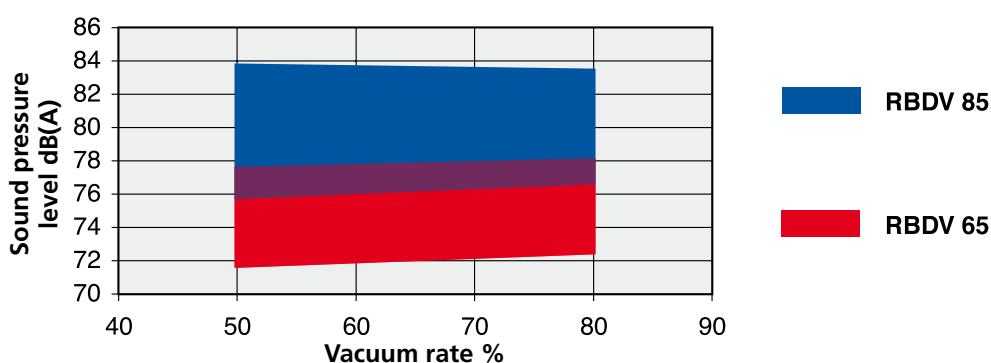
Right side opening door enclosure available too.



Blower		A	B	C	A1	D	H	L	M	Q	W	Z	X	Y	Weight kg	lbs
65	mm	660	1090	560	330	250	610	1200	100	530	48	110	14	51,5	320	705,48
	inches	25,98	42,91	22,05	12,99	9,84	24,02	47,24	4	20,87	1,89	4,33	0,55	2,03		
85	mm	720	1190	650	360	310	700	1300	100	590	55	110	16	59	435	959,01
	inches	28,35	46,85	25,59	14,17	12,20	27,56	51,18	4	23,23	2,17	4,33	0,63	2,32		



TRB-DV: NOISE LEVEL ISO 3746 *



* Free field 7m - 22,967'

ACCESSORIES

SPS



Exhaust silencer

SPF



Cooling silencer

SCE / SDL



Absorption silencer

VALVE



4 way valve
(For RB-DV 45-65-85 only)

MANIFOLDS



cast aluminium

Third inlet manifolds conveying cooling air.

The following versions are available: CC, short manifold, and CL, long manifold. Check the compatibility according to the machine's configuration.

ROBUSCH EVOLUTION DV

ROBUSCH evolution suction group with RB-DV air injection vacuum blower:

- Silent operation;
- Simple inspection: thanks to the new levels positioned on the front panel of the enclosure;
- Monitored operation;
- Compact construction.

For more detailed information, consult BLOWERS catalogue.



ROBUSCHI®

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